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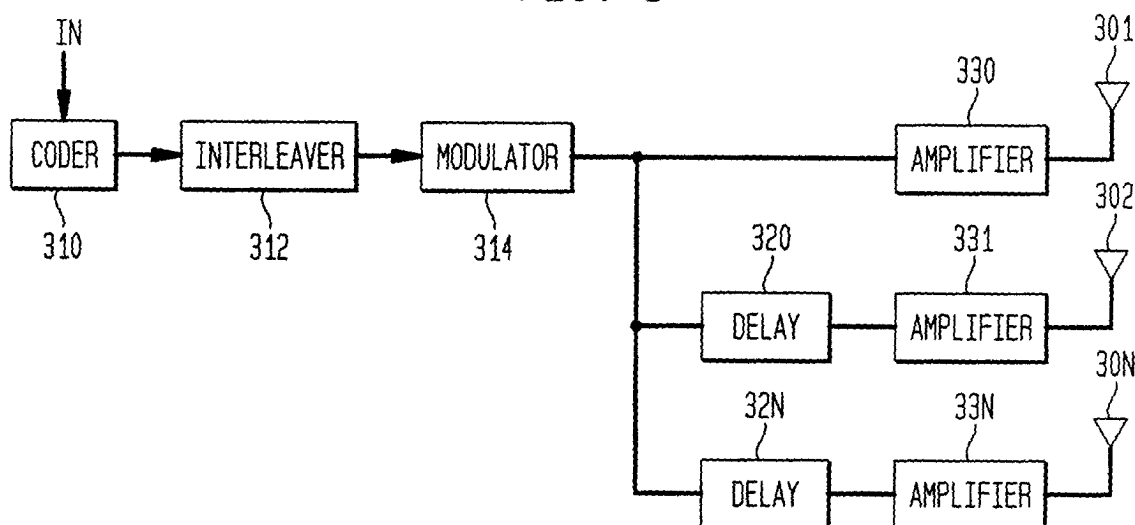
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**(54) Transmit diversity and reception equalization for radio links**

(57) In a mobile communication system, independent versions of a signal are transmitted over plural antennas. The antennas are either spatially separated or orthogonally polarized with respect to each other so that the independent versions of the signal are not subjected to correlated fading. Each independent version of the signal is transmitted from a respective antenna a fixed delay after transmission of a previous version of a signal

from a different antenna. The fixed delay is at least one information bit of the signal. Received versions of the signal are equalized in an equalizer or RAKE architecture to provide a composite signal. The equalizer has respective sets of equalizer taps that are separated from adjacent sets of equalizer taps by the fixed delay. The RAKE architecture has respective sets of RAKE fingers that are separated from adjacent sets of RAKE fingers by the fixed delay.

**FIG. 6**





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# EUROPEAN SEARCH REPORT

Application Number  
EP 99 30 8698

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